submersible water-quality, CTD & ocean sensor cable

Shielded TPE/PUR Sensor

Shielded TPE/PUR Harsh-Environment Sensor Cable

IEC 60092-376 / UL AWM · 300 V · Submersible water-quality, ctd & ocean sensor cable



IEC 60092-376 / UL AWM | 300 V (-40 to +85 °C) | Subsea / Marine Outer Protective She

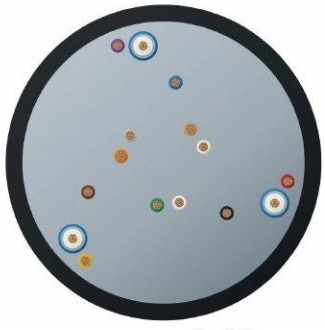
Application

Shielded TPE/PUR Harsh-Environment Sensor Cable featuring coaxial center conductor and subsea / marine outer protective sheath (IEC 60092-376 / UL AWM, 300 V, -40 to +85 °C, min. bend radius 6 × OD).

Typical uses: Aquaculture Dissolved Oxygen (DO), pH & Salinity Monitoring, Vented Hydrostatic Water-Level & Borehole Pressure Probes, Oceanographic CTD Rosettes, Current Meters & Mooring Buoys, Recirculating Aquaculture (RAS) & Wastewater Sensor Networks

Construction





Cross-section, not to scale

1. Coaxial Center Conductor
2. Low-Loss Coaxial Dielectric & Braid Shie
3. Subsea / Marine Outer Protective Sheath

Technical data

Typical values

Rated voltage / operating system	300 V (IEC 60092-376 Shielded TPE/PUR Harsh-Environment Subsea Sensor Specification)	**Core / conductor construction**	Coaxial Center Conductor — High-conductivity stranded copper (or steel-core on CB 1900) center conductor
Primary dielectric / optical buffer	Low-Loss Coaxial Dielectric & Braid Shield — Thermoplastic elastomer (TPE) core insulation + braided copper outer conductor	**Continuous operating temperature**	−40…+85 °C (submerged seawater & topside deck service)
Hydrostatic & thermal cycling endurance	Verified cold-bend and wet dielectric stability across −40…+85 °C per IEC 60092-376 Shielded TPE/PUR Harsh-Environment Subsea Sensor Specification	**Storage & transport temperature**	−40…+80 °C on export wooden/steel cable drum
Outer jacket / sheath protection	Subsea / Marine Outer Protective Sheath — Black hydrolysis- & abrasion-resistant marine Polyurethane (PUR) outer sheath	**Minimum bending radius**	6 × OD
Reinforcement / screen / bedding layer	Low-Loss Coaxial Dielectric & Braid Shield — Thermoplastic elastomer (TPE) core insulation + braided copper outer conductor	**Seawater, hydrolysis & oil resistance**	Resistant to permanent seawater immersion, hydrolysis, hydraulic oil and bio-fouling per IEC 60092-376 Shielded TPE/PUR Harsh-Environment Subsea Sensor Specification
Hydrostatic pressure & water blocking	Radial and longitudinal water-blocking integrity verified per IEC 60092-376 Shielded TPE/PUR Harsh-Environment Subsea Sensor Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	IEC 60092-376 Shielded TPE/PUR Harsh-Environment Subsea Sensor Specification		

Sizes

3 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation	Configuration	Core / stranding	Outer Ø ≈ mm	Net weight ≈ kg/km	Max. pulling kN ≈	Min. bend R mm
Shielded TPE/PUR Sensor Construction Schedule (−40…+85 °C) 3 sizes						
☐ **Shielded TPE RG59/75Ω + 4C**	1×75 Ω Coax + 4×0.75 mm² (18 AWG)	SnCu Center + Foam PE + TCWB + Subsea PUR	10.8	165	8.5	65
☐ **Shielded TPE RG213/50Ω + 6C**	1×50/75 Ω Coax + 6×1.5 mm² + 1×TP	SnCu + Dual Braid Shield + Aramid/GSWA	14.4	340	22.0	90
☐ **Shielded TPE 3×Coax + 6C**	3×75 Ω Video Coax + 6×1.5 mm² Power	Multi-Coax Bundle + Armour + Subsea Jacket	18.6	620	48.0	125

– Custom core counts, optical fiber channels, wet-mate terminations and continuous winch lengths available per IEC 60092-376 Shielded TPE/PUR Harsh-Environment Subsea Sensor Specification.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} Ω/km	Rating / Impedance / Load	Operating temp.
1×75 Ω Coax + 4×0.75 mm² (18 AWG)	26.00	300 V · 75 Ω ±3 Ω	−40…+85 °C
1×50/75 Ω Coax + 6×1.5 mm² + 1×TP	13.30	300 V · 50/75 Ω Sonar	−40…+85 °C
3×75 Ω Video Coax + 6×1.5 mm² Power	13.30	300 V · 3-Ch 75 Ω Coax	−40…+85 °C

– Every production length undergoes routine conductor DC resistance / OTDR optical attenuation, AC dielectric and dimensional verification.

Standards and approvals

- IEC 60092-376 / UL AWM Compliant
- EN 10204 3.1 Factory Test Certificate
- CE, RoHS 2 (2011/65/EU) & REACH

Certifications

Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone
+86 185 9591 3361

Email
info@tebaoflex.com

Web
tebaoflex.com/cables/shielded-tpe-pur-harsh-environment-sensor-cable

Typical values for this cable type, based on IEC 60092-376 Shielded TPE/PUR Harsh-Environment Subsea Sensor Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.